State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-16-37 Relating to Certification of New Off-Road Compression-Ignition Engines

DAIMLERCHRYSLER AG

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment:

Model Year: 2001

Typical Equipment Usage: Crane, Compressor and Other Industrial Equipment

Fuel Type: Diesel

Engine Family 1MBXL12.9R6A	Engine Displacement (<u>liters)</u> 10.0	Useful Life (hours) 8000	Emission Control Systems and Special Features Direct Diesel Injection Turbocharger Charge Air Cooler
			Smoke Puff Limiter

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) (units are expressed in grams per kilowatt-hour (g/kw-hr)), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

Engine Power <u>Rating (kw)</u> 130 <u><</u> KW<225			Exhaust Emissions (g/kw-hr)					Smoke Opacity (%)		
		Standard	<u>HC</u> 1.3	<u>NOx</u> 9.2	NMHC+NOx N/A	<u>CO</u> 11.4	<u>РМ</u> 0.54	Accel 20	Lug 15	Peak 50
		Certification	0.4	7.6		0.6	0.14	8	1	13

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels— 1996 and Later Off-Road Compression-Ignition Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 and 2426).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this

day of March 2001.

R. B. Summerfield, Chief

Mobile Source Operations Division

ATTACH MENT

LARGE ENGINE MODEL SUMMARY

Manufacturer: DaimlerChrysler AG

Process Code: New Submission

U-R-16-37

EPA Engine Family: 1MBXL12.9R6A Manufacturer Family Name: NA 4 Fuel Rate: 5.Fuel Rate: 7.Fuel Rate: 3.BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 1.Engine Code 6.Torque @ RPM 2.Engine Model (SAE Gross) 8.Fuel Rate: mm/stroke@peak 9.Emission Control (for diesel only) (for diesels only) (SEA Gross) (lbs/hr)@peak torque Device Per SAE J1930 torque 988 @1250 401 LA. E I/2 OM 401 LA 285 @ 2100 150 103.9 870 @ 1200 170 67.8 401 LA, E I/3 OM 401 LA 268 @ 2100 138 95.9 804 @ 1200 160 JEM, SPL 63.8 401 LA. E I/4 **OM 401 LA** 268 @ 1900 146 100.2 804 @ 1200 160 63.8 EM, SPL